

31. That gap is well illustrated both by shortcomings in the list of "potential solutions" that Pacific Bell claims, on page 57 of its Reply Comments, to have implemented, and by Pacific Bell's failure to implement the two recommendations that Pacific Bell mentions on page 58. Pacific Bell is proud of having restricted call forwarding to certain types of numbers -- 0+, 0-, 011, 10XXX, 900, N11, and 976. But it has NOT blocked calls to 950-XXXX and 800/950-XXXX numbers. That failure enables fraudulent callers to make calling-card calls from areas where card-calls to specific locations have been blocked by the card issuer because of high incidence of fraud. The LEC, of course, collects access charges for those fraudulent calls. The items on page 58, which Pacific Bell has not implemented, would also assist in curtailing fraudulent calls. Those switch upgrades would limit the number of calls that could simultaneously be fraudulently forwarded from a particular phone, and would limit the frequency with which the forwarded number from a particular phone could be changed. Further, although Pacific Bell claims to have implemented the SS7 detection program, to our knowledge it has not actually done so except in a few trial locations -- not widely enough so that it could actually be effective in fraud prevention.²³

²³ Id. at 57. A further example, in Pacific Bell's Reply Comments, of drawing inferences not supported by the facts is the implication that one arrest in November of 1994 and six arrests in March of 1995 have led to a decrease in the number of call-forwarding fraud cases. Id. at 58. Based on these limited data, it is quite a stretch to suggest that those arrests have had any significant effect on call-forwarding fraud.

32. To the extent that Pacific Bell has implemented fraud-control processes, the primary motivation for doing so has not actually been the prevention of fraud. Rather, the motivation apparently arises from two primary sources: pressure from other organizations and the effects on Pacific Bell customers of fraud-prevention mechanisms put in place by entities other than Pacific Bell. To wit:

- One influence was the numerous conferences and meetings sponsored by MCI's Carrier Relations and other personnel involved in LEC Billing and Technical Security issues, as well as other IXC's, held to encourage expansion of the Sleuth capabilities to address a more complete range of fraud problems.

- The second influence was complaints from Pacific Bell card holders who were justifiably upset that the Pacific Bell card worked differently depending on which IXC network carried the traffic. Each IXC was forced to block card calls in areas where fraudulent abuse was rampant, because Pacific Bell had not accepted liability for fraud associated with Pacific Bell's calling cards. The IXC's blocking decisions differed from one IXC to another, depending on their own evaluation of the fraud risks in a given area. If the IXC's were indemnified for those fraud losses, or the losses were minimized by effective fraud control on the part of Pacific

Bell, then the IXCs would not be driven to block RBOC calling card calls, and the performance of the RBOC card product would be improved.

33. The basic point here is that Pacific Bell's anti-fraud efforts have generally been implemented only in response to outside pressures, after the fraud problems that should have been addressed in the initial product design had become major problems to other providers. The problems are typically not addressed in the initial product designs, in spite of pointers and recommendations from those entities that are forced to bear the burden of fraud produced via those products. MCI very much supports the actions of PUCs in rejecting or questioning tariffs in which fraud potentials have not been fully addressed. We hope that such actions will help to motivate RBOCs to address fraud problems in advance, rather than after the fact.

VII.

Final Conclusions

34. The position Pacific Bell has tried to portray does not correspond to the reality of the fraud control processes in TFPC and in the telecommunications industry generally. I have been a member of the TFPC for more than five years, and have personally observed the degree to which RBOCs implement the fraud prevention measures recommended by that body. Further, I have noted that the expertise of at least some RBOC representatives in matters of


fraud responsibility and the effects of fraud on IXCs is questionable. For example, the TFPC co-chair mentioned in the Pacific Bell response²⁴ -- a representative of Pacific Bell -- was not aware of such an elementary point as the fact that IXCs pay access charges to Pacific Bell and the other LECs, until just this year, when it came up in a discussion about an article that addressed the subject. Obviously, that representative was not in a position to understand the nature or the magnitude of fraud costs that would be borne by IXCs because of RBOC products for which IXCs not only receive no revenue, because of fraudulent use of the products, but are also required to pay access charges to RBOCs for the "privilege" of carrying the associated non-revenue traffic!

35. The TFPC recommendations have not been adequately effective in preventing fraud. This is not only because of flawed recommendations, although, as discussed above, some of those recommendations are less than ideal, but also because those recommendations are often not implemented by those companies that are in the best position to effectively address the fraud. Whether consciously or unconsciously, the RBOCs often use TFPC as a mechanism for discussion, rather than action, on fraud-prevention issues.

²⁴ Pacific Bell Reply Comments at 56.

36. MCI attempts to limit the fraud impacts of LEC products by restricting the use of those products when the threat can be recognized. Obviously, MCI would prefer to carry the traffic associated with these LEC products, rather than having to limit their implementation due to excessive fraud risks. But MCI cannot do so in a competitive environment when the LEC products generate so much fraud costs. The major source of fraud loss risk for MCI and the other IXCs is LEC products and line services.

Further Affiant saith not.


David P. Jordan

Subscribed and sworn to before me
this 5th day of March, 1996


Notary Public

MARGARET LAU
NOTARY PUBLIC COMMONWEALTH OF VIRGINIA
My Commission Expires March 31, 1998

EXHIBIT A

M E M O R A N D U M

TO: THE COMMISSION

FROM: Utilities Division

DATE: April 20, 1995

**RE: U S WEST COMMUNICATIONS, INC. - TARIFF FILING TO INTRODUCE
NEW CUSTOM CALLING FEATURES (DOCKET NO. E-1051-94-298)**

On August 24, 1994, U S WEST Communications, Inc. (U S WEST) filed tariff revisions to introduce new Custom Calling features. The Commission initially suspended the filing for 60 days (Decision No. 58791, dated September 21, 1994) and further suspended the filing for an additional 180 days (Decision No. 58833, dated November 2, 1994). The interexchange carriers (IXCs) had expressed concern that the proposed new features could result in increased billed, but uncollected, charges for telephone calls and the suspension period was to allow U S WEST and the IXCs the opportunity to meet and determine if the service could be made acceptable to both.

The proposed new Custom Calling features are Remote Access Forwarding (RAF) and Scheduled Forwarding (SF). Both features permit customers to forward incoming calls to another number. While the programmable call forwarding services that are currently available must be activated and deactivated from the subscriber's own phone, with the services proposed in this filing, customers can activate, deactivate, or change their "forward to" number from any tone dialing phone by dialing a local number and using a subscriber-specific personal identification number (PIN). The local number provides access to an automated system which uses a series of prompts to guide customers to make changes via the phone keypad at any location. With Scheduled Forwarding, subscribers can also preprogram the system and schedule in advance specific times, days and destination numbers to which their incoming calls will forward.

The IXCs are concerned because these services allow customers to activate, deactivate, or change the "forward to" number from any tone dialing phone, not just from the subscriber's phone. According to the IXCs, because of the remote access capability, RAF and SF would be more easily used by third parties to fraudulently access and use subscribers' phone numbers to make unauthorized calls without the knowledge of the customer. Fraudulent calls are an important issue to IXCs because not only do they not get reimbursed for the use of their network on such calls, but also have to pay originating and terminating access to the local exchange carriers for these fraudulent calls on which the IXCs receive no compensation.

THE COMMISSION
April 20, 1995
Page 2

U S WEST, however, believes that the proposed services, which incorporate Advanced Intelligent Network (AIN) capabilities such as enhanced toll fraud screening and call forwarding restrictions, will prevent any significant level of fraud from occurring in conjunction with the proposed services. According to the IXCs, significant fraud has occurred with Remote Access to Call Forwarding (RACF) which is a service offered by other RBOCs and is similar to RAF. U S WEST however, differentiates its proposed services from similar services, like RACF, by pointing out that RACF is a central office based service that does not utilize any of the AIN toll fraud screening capabilities that are built into its proposed RAF and SF services.

On February 9, 1995, U S WEST revised its August 24, 1994, filing. At Staff's request, the proposed tariff was revised to include a list of restricted call forwarding destinations for calls forwarded by RAF or SF. U S WEST has agreed to restrict lines equipped with RAF or SF from forwarding to destinations that have typically been used to complete fraudulent calls. Included in the list of restricted calls are: international calls; 800, 700, 900, 850, or 976 calls; all operator assisted dialing arrangements such as 0+ and 0-; N11 and 555-1212 information calls; third-number billed calls; speed dialed calls. Additionally, no more than four calls per hour would be allowed to be forwarded under this service.

The IXCs have recommended that in addition to the restricted call forwarding destinations proposed in U S WEST's revisions of February 9, 1995, U S WEST prevent the forwarding of calls through RAF and SF to payphones. According to U S WEST, the technical capability to prevent RAF and SF from forwarding calls to payphones does not currently exist, but is being developed and will be available within approximately six (6) months. The IXCs are also concerned that a significant number of fraudulent collect calls may be completed using these services and have requested that U S WEST restrict them also. U S WEST, however, feels that the ability to forward collect calls is an important component of this service and that a large part of fraudulent collect calls are made to pay telephones. Preventing calls from being forwarded to pay telephones, then, would significantly reduce the potential for fraud on collect calls forwarded by RAF or SF.

For each line, business or residence, equipped with Remote Access Forwarding and Scheduled Forwarding, the proposed monthly charges are \$6.95 and \$7.95, respectively. U S WEST proposes to waive the standard \$13.00 installation charge in an area during a 90 day introduction period. In addition, if during the first 60 days from installation, the customer is not satisfied with the

THE COMMISSION
April 20, 1995
Page 3

service, the customer may change to a different call forwarding service at no additional charge or U S WEST will credit the customer's account the amount billed for the service.

Staff has reviewed U S WEST's supporting information and has determined that the proposed rates exceed the costs of providing the services. Staff recommends that the tariff be approved, as revised, on an interim basis for a period of twelve (12) months. Staff is recommending interim approval so that RAF and SF can be offered on a trial basis. The purpose of the trial is to gauge the effect the proposed services have on toll fraud levels.

Staff further recommends the following:

- * That during the trial period, U S WEST provide the IXCs the telephone numbers of subscribers to RAF and SF. Subscribers' telephone numbers would be provided to the IXCs under the terms of a protective agreement. This number information would be used by the IXCs solely for the purpose of identifying suspected toll fraud associated with these services. The IXCs should notify U S WEST if any significant fraud occurs within three (3) working days. Subscribers should be notified that this information is being provided to the IXCs.
- * That U S WEST monitor and collect any information which documents or quantifies RAF or SF fraud such as any customer billing adjustments made because of suspected toll fraud associated with these services. This information will allow U S WEST to identify any RAF and SF fraud that occurs. Also, the information collected can be used at the end of the trial period to quantify the effect these proposed services have had on toll fraud levels during the trial.
- * That U S WEST not be allowed to charge the IXCs for the access charge portion of those RAF and SF calls made during the trial period which were fraudulent. Accordingly, at the end of the trial period U S WEST will credit the IXCs for any access that has been paid in conjunction with a fraudulent RAF or SF call.
- * That ninety (90) days prior to the end of the interim approval period, U S WEST should file for permanent approval of the tariff filing if it so desires. At this time, U S WEST should submit the information it

THE COMMISSION
April 20, 1995
Page 4

collected during the trial concerning instances of toll fraud and any actions it has taken to further minimize fraud.

- * That U S WEST install the capability in its network to prevent call forwarding by RAF and SF to payphones within seven (7) months of the date of this Commission Order. If U S WEST expects that it cannot meet this requirement, Staff further recommends that U S WEST be required to file for an extension of time to meet this requirement on or before October 1, 1995, and if the extension is not requested, or denied, that U S WEST be required to suspend offering the RAF and SF services until the Company has certified to Commission Staff that it can prevent calls forwarded by RAF and SF from reaching pay telephones.
- * That U S WEST inform all subscribers to RAF and SF of the trial period and that permanent approval of the services is not assured.

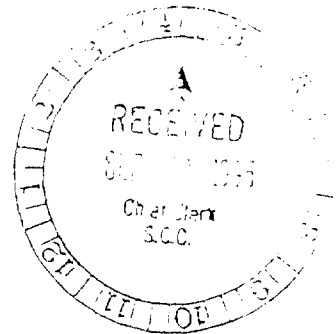


Gary Yaquinto
Director
Utilities Division

GY:DS:lhk/CCR

ORIGINATOR: Del Smith

BEFORE THE
NEW MEXICO STATE CORPORATION COMMISSION



IN THE MATTER OF AN APPLICATION)
OF U S WEST COMMUNICATIONS, INC.)
TO AMEND ITS EXCHANGE AND)
NETWORK SERVICES TARIFF TO)
INTRODUCE REMOTE ACCESS)
FORWARDING AND SCHEDULED)
FORWARDING)

DOCKET NO. 95-392-TC

DIRECT TESTIMONY

of

KEN SOLOMON

Filed September 20, 1995

DIRECT TESTIMONY OF KEN P. SOLOMON

1 Q. PLEASE STATE YOUR NAME, POSITION AND ADDRESS.

2 A. My name is Ken Solomon. My position is Director of the Telecommunications
3 Department of the New Mexico State Corporation Commission. My address
4 is: P.O. Drawer 1269, Santa Fe, New Mexico 87504-1269.

5 Q. DO YOU HAVE A DETAILED STATEMENT OF QUALIFICATIONS AND
6 EXPERIENCES IN THE AREAS OF PUBLIC UTILITY REGULATION?

7 A. Yes, such a statement is included in Appendix A, attached to this testimony.

8 Q. IN PREPARING YOUR TESTIMONY WHAT DOCUMENTS AND INFORMATION
9 HAVE YOU REVIEWED?

10 A. I have reviewed the direct testimony of Ms. Peggy Nownes who filed testimony
11 on behalf U S WEST Communications (the Company), Mr. David Jordan for
12 MCI, Ms. Lilli Calcara for SPRINT and any and all exhibits attached to the
13 aforementioned testimony.

14 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

15 A. The purpose of my testimony is to put forth Staff's position regarding the
16 Company's proposal to offer the Remote Access Forwarding (RAF) and
17 Scheduled Forwarding (SF) services.

18 Q. HAVE SPRINT AND MCI RAISED CONCERNS ABOUT THE POSSIBILITY OF
19 FRAUD ASSOCIATED WITH THESE PRODUCTS?

20 A. Yes they have.

DIRECT TESTIMONY OF KEN P. SOLOMON

1 Q. HAS THE COMPANY ADEQUATELY ADDRESSED ALL OF THE CONCERNS
2 RAISED BY THE INTEREXCHANGE COMPANIES (IXC'S)?

3 A. No, I do not believe that it has.

4 Q. COULD YOU PLEASE DISCUSS THE ISSUES SURROUNDING FRAUD IN MORE
5 DETAIL?

6 A. Certainly. The Company stated in testimony that the problems raised by the
7 IXC's associated with third party billing, forwarding to a restricted line and
8 customer authentication have been solved and that they are unaware of any
9 toll fraud problems in any of the eight states where the Company currently
10 provides the service (Nownes Direct, pg. 17, Ins 17-20). Yet, the Company
11 is unwilling to indemnify the IXC's for any toll fraud that may occur (Jordan
12 Direct, pg. 5, Ins. 5-12). In fact, Ms. Calcara claims that in the second quarter
13 of 1995 alone SPRINT has suffered toll loses in the amount of \$330,000 as a
14 result of Call Forwarding and RAF/SF in the U S WEST's territory.

15 Q. COULD YOU PLEASE DISCUSS YOUR RECOMMENDATIONS REGARDING
16 AUTHENTICATION OF RAF AND SF SERVICE ORDERS WHICH WOULD HELP
17 TO PREVENT TOLL FRAUD?

18 A. Yes. In order to authenticate a genuine order for the services in question the
19 Company could simply take the customers order and then follow this up with
20 a confirmation letter sent to the billing address associated with that customer.

DIRECT TESTIMONY OF KEN P. SOLOMON

1 Upon receipt of this letter the customer (after reading the literature explaining
2 the service) would decide if they still desired the service at which time they
3 would sign the letter and return it to the Company. This procedure would
4 ensure that the individual requesting the service is truly the customer to whom
5 the line is billed. Once the customer has provided written authorization to the
6 Company they would be assigned a PIN number which they could then use to
7 forward call at anytime without any further need for repeat authorization.

8 Q. COULD YOU PLEASE DISCUSS YOUR RECOMMENDATIONS REGARDING
9 CALLS FORWARDED TO A RESTRICTED LINE AND FORWARDED CALLS THAT
10 ARE BILLED TO THIRD PARTIES?

11 A. Yes. USW does not address the issues of the fraud potential inherent in the
12 ability of a "fraudster" to forward calls to a restricted line in its direct
13 testimony. This is a problem on an intra as well as on an interstate basis. The
14 Company does provide a solution for the potential problems associated with
15 intrastate third party billing to a forwarded line but does not provide a solution
16 for interstate third party billing.

17 The Staff therefore recommends that before these services are deployed
18 the Company develop and deploy a method to ensure that calls cannot be
19 forwarded to a restricted line. The Staff further recommends that U S WEST
20 utilize their Line Information Data Base to mark telephone lines that have been

DIRECT TESTIMONY OF KEN P. SOLOMON

1 forwarded in order to prevent third party billing to a line that had been
2 forwarded (on an interstate basis). As a result, the Staff recommends that the
3 Commission deny the Company's filing until the Company solves the fraud
4 problems outlined above.

5 Q. ARE THERE OTHER ISSUES INVOLVED WITH THIS FILING THAT YOU HAVE
6 NOT DISCUSSED ABOVE?

7 A. Yes, there are. The Company has proposed that the rates charged to business
8 and residential customers for these services be priced at the same level. The
9 Commission has traditionally maintained a price differential between these two
10 classes of customers and the Staff would recommend that the Company
11 continue to maintain this differential. The Staff would therefore recommend
12 that when the Company solves the fraud issues outlined above they then
13 propose rates for business customers that are higher than the rates charged for
14 residential customers. The Company has the ability to do this with very little
15 difficulty considering the large margins involved in this offering.

16 The Staff also takes issue with the proposal of the Company to include
17 a "30 Day Product Guarantee" in the tariff. Due to the fraud potential detailed
18 by the SCC's in this case it appears to the Staff that if this product is offered
19 without the suggested safeguards that a large amount of customer
20 dissatisfaction could result. One example that comes to mind is a customer

DIRECT TESTIMONY OF KEN P. SOLOMON

1 whose line has been compromised and as a result has multiple charges on his
2 or her bill which the customer claims is not their responsibility. This could
3 lead to a large number of customers taking advantage of this 60-day money-
4 back guarantee. Once the Company has solved these fraud problems Staff
5 would not necessarily oppose the 60 day product guarantee in the subsequent
6 filing.

7 Q. IF THE COMMISSION WISHES TO APPROVE THIS FILING WHAT WOULD THE
8 STAFF SUGGEST?

9 A. The Staff would suggest that the Commission order the Company to abide by
10 the recommendations that were outlined in the testimony of the Arizona
11 Corporation Commission that was attached as Exhibit DPJ-1 to Mr. Jordan's
12 testimony and reproduced below with modifications to take into account
13 Staff's concerns regarding the proposed rates and the 60-day product
14 guarantee:

15 Staff has reviewed U S WEST's supporting information and has
16 determined that the proposed rates exceed the costs of providing the services.
17 Staff recommends that the tariff be approved, (with exception of the suggested
18 rate differential outlined below), on an interim basis for a period of twelve (12)
19 months. Staff is recommending interim approval so that RAF and SF can be
20 offered on a trial basis. The purpose of the trial is to gauge the effect the

DIRECT TESTIMONY OF KEN P. SOLOMON

1 proposed services have on toll fraud levels.

2 Staff further recommends the following:

3 That during the trial period, U S WEST provide the IXC's the telephone
4 numbers of subscribers to RAF and SF. Subscribers' telephone numbers would
5 be provided to the IXC's under the terms of a protective agreement. This
6 number information would be used by the IXC's solely for the purpose of
7 identifying suspected toll fraud associated with these services. The IXC's
8 should notify U S WEST if any significant fraud occurs within three (3) working
9 days. Subscribers should be notified that this information is being provided to
10 the IXC's.

11 That U S WEST monitor and collect any information which documents
12 or quantifies RAF or SF fraud such as any customer billing adjustments made
13 because of suspected toll fraud associated with these services. This
14 information will allow U S WEST to identify any RAF and SF fraud that occurs.
15 Also, the information collected can be used at the end of the trial period to
16 quantify the effect these proposed services have had on toll fraud levels during
17 the trial.

18 That U S WEST not be allowed to charge the IXC's for the access
19 charge portion of those RAF and SF calls made during the trial period which
20 were fraudulent. Accordingly, at the end of the trial period U S WEST will

DIRECT TESTIMONY OF KEN P. SOLOMON

1 credit the IXC's for any access that has been paid in conjunction with a
2 fraudulent RAF or SF call.

3 That ninety (90) days prior to the end of the interim approval period, U
4 S WEST should file for permanent approval of the tariff filing if it so desires.
5 At this time, U S WEST should submit the information it collected during the
6 trial concerning instances of toll fraud and any actions it has taken to further
7 minimize fraud.

8 That U S WEST install the capability in its network to prevent call
9 forwarding by RAF and SF to payphones within seven (7) months of the date
10 of this Commission Order. If U S WEST expects that it cannot meet this
11 requirement, Staff further recommends that U S WEST be required to file for
12 an extension of time to meet this requirement in a timely manner, and if the
13 extension is not requested, or denied, that U S WEST be required to suspend
14 offering the RAF and SF services until the Company has certified to
15 Commission Staff that it can prevent calls forwarded by RAF and SF from
16 reaching pay telephones.

17 That U S WEST inform all subscribers to RAF and SF of the trial period
18 and that permanent approval of the services is not assured.

19 That U S WEST charge a higher rate for business customers than for
20 residential customers for each of the proposed services and submit a new

DIRECT TESTIMONY OF KEN P. SOLOMON

1 proposed tariff for Commission approval.

2 That the Company keep track of the number of customers requesting
3 their money back in regard to the 60-day product guarantee and the revenue
4 associated with this tariff provision.

5 SUMMARY OF RECOMMENDATIONS:

6 Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS DOCKET.

7 A. I recommend that:

8 1.) in order to authenticate a service order for RAF or SF the Company
9 should take the customers order and then follow this up with a
10 confirmation letter sent to the billing address associated with that
11 customer. Upon receipt of this letter the customer would decide if they
12 still desired the service at which time they would sign the letter and
13 return it to the Company. This procedure would ensure that the
14 individual requesting the service is truly the customer to whom the line
15 is billed. Once the customer has provided written authorization to the
16 Company they would be assigned a PIN number which they can then
17 use to forward call at anytime without any further need for repeat
18 authorization.

19 2.) The Commission deny the Company's filing until such time as the
20 Company develops and deploys a method to ensure that calls cannot be

DIRECT TESTIMONY OF KEN P. SOLOMON

1 forwarded to a restricted line and, that U S WEST utilize their Line
2 Information Data Base to mark telephone lines that have been forwarded
3 in order to prevent third party billing to a line that has been forwarded
4 (on an interstate basis).

5 3.) When the Company solves the fraud issues outlined above they then
6 propose rates for business customers that are higher than the rates
7 charged for residential customers.

8 4.) The 60-Day Product Guarantee outlined in the proposed tariff not be
9 considered until such time as the fraud issues are solved.

10 5.) In the event that the Commission rejects Staff's primary
11 recommendations the Commission order the Company to follow the
12 recommendations that were outlined in the testimony submitted to the
13 Arizona Corporation Commission along with the two additional items
14 that were added to include the additional concerns the New Mexico
15 Commission Staff.

16 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

17 A. Yes it does. As in other proceedings before this Commission, I will offer oral
18 sur-rebuttal testimony at the hearing if appropriate. But after reviewing the
19 Company's rebuttal testimony, I reserve the right to supplement or modify this
20 testimony orally on the stand at hearing.

BEFORE THE
NEW MEXICO STATE CORPORATION COMMISSION

IN THE MATTER OF AN APPLICATION)
OF U S WEST COMMUNICATIONS, INC.)
TO AMEND ITS EXCHANGE AND)
NETWORK SERVICES TARIFF TO)
INTRODUCE REMOTE ACCESS)
FORWARDING AND SCHEDULED)
FORWARDING)

DOCKET NO. 95-392-TC

AFFIDAVIT OF KEN P. SOLOMON

I, KEN SOLOMON, being first duly sworn, upon my oath, state that I am the Director of the Telecommunications Department, State Corporation Commission, and that the statements contained herein are true and correct to the best of my knowledge, information and belief.



KEN P. SOLOMON

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

SUBSCRIBED, SWORN TO AND ACKNOWLEDGED before me this
20th day of September, 1995, by Ken P. Solomon.



NOTARY PUBLIC

My Commission Expires:

7-28-99

EXHIBIT B

Belcore

 Bell Communications Research

Technical Reference
TR-TSY-000217
Issue 2, November 1988

**CLASSSM Feature:
Selective Call Forwarding**

FSD 01-02-1410

A Module of LSSGR, TR-TSY-000064

1. Introduction

Selective Call Forwarding (SCF), a CLASSSM Feature is an incoming call management feature that allows customers to define a special list of telephone numbers and a remote station. Incoming calls that are on the list will be forwarded to the remote station.

This Technical Reference (TR) defines Bellcore's view of generic requirements for SCF for residential and small business (non-Centrex) customers. It replaces Issue 1, June 1986 to reflect changes in activation/deactivation procedures and modifications to screening list editing procedures.

1.1 Background

SCF is a revenue-producing service intended for residential and business telephone users.

Interoffice application of the service depends on deployment of signaling methods capable of transmitting calling line identification.

1.2 High Level Feature Description

When SCF is activated on a particular line, certain terminating calls are forwarded to a designated remote station. Call Forwarding is provided whenever a call is received from someone whose telephone number has been indicated on a list of numbers referred to as the SCF screening list. Terminating calls from callers whose telephone numbers cannot be identified or have not been indicated on the list are given standard terminating treatment (without selective forwarding). This treatment is determined by the line status and other features on the called party's line.

The SCF screening list is a set of 7- and/or 10-digit Directory Numbers (DNs) for calls that should be forwarded to a remote station. Business group extensions can also be included on the SCF screening list. The structure of the list and methods for updating its contents are described in the *CLASSSM Feature: Screening List Editing*, TR-TSY-000220.¹

SCF should be independent of other Call Forwarding services such as Call Forwarding Variable, Usage Sensitive Call Forwarding, Call Forwarding - Don't Answer, and Call Forwarding - Busy Line. The customer should be able to designate a separate remote DN for each feature: one for SCF, one for Call Forwarding variable, etc. Calls from DN's that are specified on the SCF screening list should be forwarded to the SCF remote station. Calls from DN's that cannot be determined or are not on the list may be forwarded to the remote station designated for the second Call Forwarding service.

2. User Perspective

A customer can initiate procedures for activating, deactivating, modifying, specifying the remote DN, or obtaining a status report for SCF by going off-hook, receiving dial tone, and dialing the SCF access code. The SCF access code should be at least three characters in length. The first character must be "*" while the remaining characters can be any digit 0 through 9. The character string "11" can be used in place of the character "*" for dual-tone multifrequency (DTMF) service and must be used in place of this character for rotary dial service. Each BOC should be able to

¹ CLASS is a service mark of Bellcore.

assign these codes on an individual office basis. The suggested access codes for SCF are *63 and *83. Each code should provide the customer with access to the same set of SCF capabilities. This allows BOCs, who currently have customers using *63 and *83 as separate activation and deactivation codes, to continue such use while permitting other BOCs, who are not currently providing screening list features, to advertise just one code as a single access code.

Once either SCF access code has been successfully entered, the customer should receive announcements providing the following information (not necessarily in this order):

- The name of the service (i.e., SCF)
- The current status of SCF (i.e., active or inactive)
- The current size of the customer's SCF list
- The customer's remote DN (when SCF is active)
- Actions and associated dialing codes available to the user
 - Confirm or change remote DN (when SCF is active)
 - Add entr(y)ies to the list
 - Delete entr(y)ies from the list
 - List review
 - Change status (i. e., active to inactive or inactive to active).

Call attempts to lines that have SCF active should be forwarded to the designated remote station if the calling DN has been specified on the SCF screening list. Forwarding should take place whether the base station is busy or idle. This includes the case when the customer is engaged in a screening list editing session for SCF or any other screening list feature, as long as SCF is active and the calling DN is on the customer's SCF list. When a call has been received and forwarded, a ring reminder is given if the base station is idle.

SCF customers should be able to eliminate and reinstate the ring reminder on a service order basis. A forwarded call cannot be answered at the base station. All forwarded calls will be treated in the same manner as if the forwarding were caused by the Call Forwarding Variable service (see *LATA Switching Systems Generic Requirements (LSSGR)*, TR-TSY-000064, FSD 01-02-1401⁽²⁾)

Call attempts from DNs that cannot be identified or are not on the SCF screening list should not be forwarded except in accordance with another active Call Forwarding service.

3. Feature Requirements

3.1 Feature Operations

When the customer has successfully dialed one of the SCF access codes, the system should provide the announcements described in Section 2.

If the service is active at the time the access code is dialed, the system should provide an announcement stating the existing remote DN and instructing the customer to confirm it or specify a new remote DN. If a new remote DN is specified, the system should voice back the new remote DN and instruct the customer to confirm it or specify another remote DN. This process should be repeated until the customer specifies the confirm remote DN command. Once this occurs, the